

STATUS OF CLAIMS

Claims 1 – 36 (cancelled).

37. (NEW) A batch process for water content material determination in a measurement apparatus, the process comprising: evaporating and combusting an aqueous sample in at least one heating vessel equipped with a heating facility, feeding the combustion product in a transport gas flow leading to a detector, determining the concentration of a gaseous compound of the water content material, and calibrating the apparatus with a predetermined amount of a calibrating gas which contains a predetermined concentration of the element corresponding to the water content material, said calibration gas, in the calibration step, being fed in the transport gas flows instead of the combustion product.

38. (NEW) A process according to claim 37, wherein the water content material being determined is organic carbon content and/or nitrogen.

39. (NEW) A process according to claim 37, wherein the calibration gas has as predetermined CO₂ content for determining the amount of organic carbon (TOC) in a plurality of measured samples.

40. (NEW) A process according to claim 37, wherein measuring steps with the combustion products being fed in the transport gas flow are carried out alternating with calibration steps with the calibration gas being fed in the transport gas flow.

41. (NEW) A process according to claim 37, wherein the predetermined amount of calibration gas is set by filling a reservoir with one of a known volume of gas under atmospheric pressure or with pressure compensation, and wherein the flow of transport gas, after filling with the calibration gas, passes through the reservoir.

42. (NEW) A process according to claim 41, wherein the reservoir is a section of a hose.

43. (NEW) A process according to claim 37, wherein the calibration gas is fed into the heating vessel several times during a calibration step, and wherein during each such feeding, the water content is recorded in the detector.

44. (NEW) A process according to claim 43, where a calibration step comprises several sub-steps with a large number of different calibration gases containing different predetermined amounts of the element to be detected.

45. (NEW) A process according to claim 37, wherein a range under a measured signal peak on the detector is integrated and scaled to the predetermined content of the element in the calibration gas.

46. (NEW) A process according to claim 45, wherein a predetermined correction factor is used for scaling.

47. (NEW) A process according to claim 37 applied to highly pure water for pharmaceutical application.

48. (NEW) An apparatus for determining water content material comprising a measured sample feeding unit, a heating vessel having inlet and outlet ends, a transport gas source, a detector unit arranged at the outlet end of the heating vessel, a flow path linking the inlet end of the heating vessel to the transport gas source, the measured sample feeding unit being connectible and lockable to the transport gas source, at least one calibration gas reservoir which is connectible to the flow path of the transport gas flow, and switching means for connecting either the sample feeding unit or the calibration gas reservoir with the flow path of the transport gas.

49. (NEW) An apparatus according to claim 48, further comprising at least one gas cylinder containing a calibration gas and connected in a lockable fashion to the flow path of the transport gas.

50. (NEW) An apparatus according to claim 49, wherein the calibration has a predetermined CO₂ concentration.

51. (NEW) An apparatus according to claim 49, wherein a section of the transport flow path is a hose section having a predetermined volume, said gas cylinder being connectible to said hose section.

52. (NEW) An apparatus according to claim 49, further comprising a plurality of gas cylinders containing the calibration gas in different concentrations, said gas cylinders being connectible to the transport flow path and being capable of being shut off individually.